

SUPPORT FOR THE AMENDMENTS

Claims 1-3, 7-9, 20-24, and 37-39 have been amended.

Claims 14, 15, 17-19, 29, 30, 32-34, 44, 45, and 47-49 have been canceled.

Support for the amendment of Claims 1-3, 7-9, 20-24, and 37-39 is provided by original Claims 1-9 and page 11, line 8 to page 17 of the specification.

No new matter is believed to be entered by the present amendments.

REMARKS

Claims 1-13, 16, 20-28, 31, 35-43, 46, 50, and 51 are pending in the present application.

At the outset, Applicants wish to thank the Examiner for the recognition that Claims 13, 16, 20, 21, 28, 31, 35, and 36 are free from the art of record and are allowable. In view of the amendments herein, Applicants submit that the objection to these claims as depending from a rejected base claims is obviated by amendment. In addition, Applicants wish to thank the Examiner for the recognition that corresponding Claims 43, 46, 50, and 51 are also free from the art and appear allowable following the amendments herein to address the indefiniteness rejection. Applicants request favorable review of the amendments herein and that this application be promptly passed to allowance.

The rejection of Claim 2 under 35 U.S.C. §112, second paragraph, is respectfully traversed but, nonetheless, obviated by amendment.

Applicants maintain their traversal for the reasons of record of this ground of rejection with respect to the clarity of the phrase “a functional equivalent gene is considered to be”. With respect to the Examiner’s new allegations, Applicants make no further statement with respect to the propriety of this ground of rejection and in no way acquiesce to the same. Nonetheless, solely to expedite allowance of the claimed invention, Applicants have deleted the phrase “a functional equivalent gene is considered to be” from Claim 2.

As such, withdrawal of this ground of rejection is requested.

The rejection of Claims 7-9, 23, 24, and 37-51 under 35 U.S.C. §112, second paragraph, is obviated by amendment.

Applicants make no statement with respect to the propriety of this ground of rejection and in no way acquiesce to the same. Nonetheless, solely to expedite allowance of the claimed invention, Applicants have replaced "homology" with "identity" in Claims 7 and 37. In addition, Claims 8, 9, 23, 24, 38, and 39 have been amended based on the specification at page 14, lines 20-27.

As such, withdrawal of this ground of rejection is requested.

The objection to the specification is obviated by deletion of the embedded hyperlink. Withdrawal of this ground of objection is requested.

Finally, the rejection of Claims 1-12, 14, 15, 17-19, 22-27, 29, 30, 32-34, 37-42, 44, 45, and 47-49 under 35 U.S.C. §102(b) over Yamamoto et al is obviated by amendment.

Consistent with the Examiner's recognition that Yamamoto et al fail to disclose or suggest any recombinant microorganisms within the scope of the claimed invention where the heterologous protein is selected from the group consisting of an oxidoreductase, an isomerase, an α -amylase, and a protease, Applicants submit that Yamamoto et al do not anticipate any of the pending claims.

Further, Applicants **submit herewith** Simotsu & Henner, J Bacteriol 168(1): 380-388, 1986, which is cited by Yamamoto et al. Yamamoto et al measured β -galactosidase activity with a β -galactosidase assay as described in Simotsu (see, Materials and Methods). In the β -galactosidase assay, bacillus cells were frozen and thawed, and then incubated with lysozyme (see, " β -galactosidase assays" on page 381 of Simotsu), which indicates that the cells were

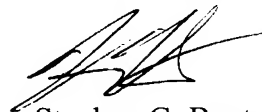
lysed. Thus, the β -galactosidase measured in this assay may be present intracellularly, rather than being secreted extracellularly. Thus, the Examiner's position that "The plasmids comprise ... a secretion signal (β -galactosidase activity was accessed from the cell culture media ... , indicating the presence of a secretion signal)" is inaccurate. Thus, even without the amendments herein, Applicants submit that Yamamoto et al do not anticipate the claimed invention.

Withdrawal of this ground of rejection is requested.

Applicants submit that the present application is now in condition for allowance.
Early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Stephen G. Baxter
Attorney of Record
Registration No. 32,884

Vincent K. Shier, Ph.D.
Registration No. 50,552

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 08/03)